Report Date: 30 Jun 2014

Summary Report for Individual Task
551-88L-2062
Maintain a Propulsion System
Status: Approved

Condition: Aboard a vessel, at sea, at anchor or moored alongside a pier, day or night, under all sea and weather conditions, given a propulsion system,using the appropriate technical manuals, while wearing appropriate PPE, (i.e. hearing protection, Nitrile gloves, eye protection, etc.) with no injuries and/or damage to equipment.

Standard: Conduct maintenance procedures of the propulsion systems in IAW appropriate technical manuals.

Special Condition: None

Safety Risk: High

MOPP 4:

Task Statements

Cue: None

DANGER

None

WARNING

None

CAUTION

None

Remarks: None

Notes: None

Performance Steps

1. Conduct annual inspection of the Torsional Flex Coupling, (refer to Figure 551-88L-2062_01).

    a. Check flex coupling rubber for:

        (1) Dry rot.

        (2) Severe cracking.

        (3) Cuts.

        (4) Torsional rotation marks for extreme offset.

    b. If damage is found arrange for manufacturer inspection of the coupling.

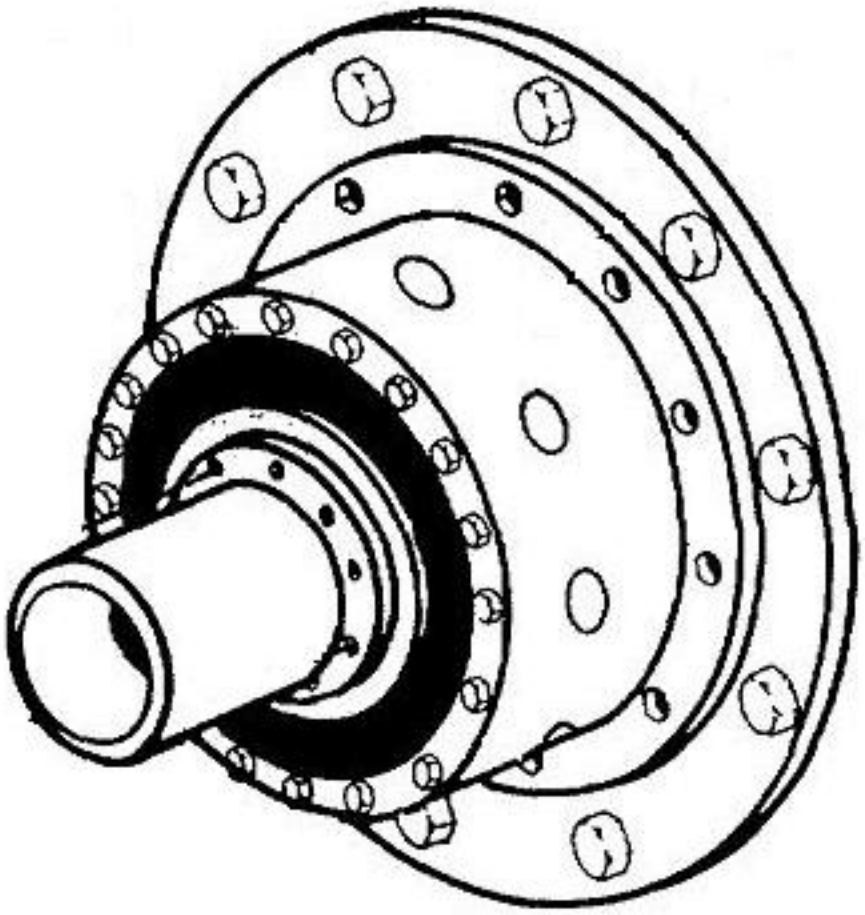

Figure 551-88L-2062_01
Torsional Flex Coupling

2. Conduct maintenance of the Reverse Reduction Gear.

    a. During use.

        (1) Observe reduction gear for excessive vibration or unusual noise during operation.

        (2) Visually inspect for oil leaks.

b. Semi annually.

(1) Sound with a hammer, to detect for signs of loosened:

(a) Hold-down bolts.

(b) Ties.

(c) Chocks.

(2) Tighten any loose fastenings found.

3. Conduct operational test of the Shaft brake, (refer to Figure 551-88L-2062_02).

a. Manually engage and disengage the shaft brake at the shaft brake panel to check for proper operation.

b. Ensure that the shaft brake engages with the main diesel engine running and the reduction gear in neutral.

c. Ensure the shaft brake disengages when the reduction gear is engaged in either forward or reverse.

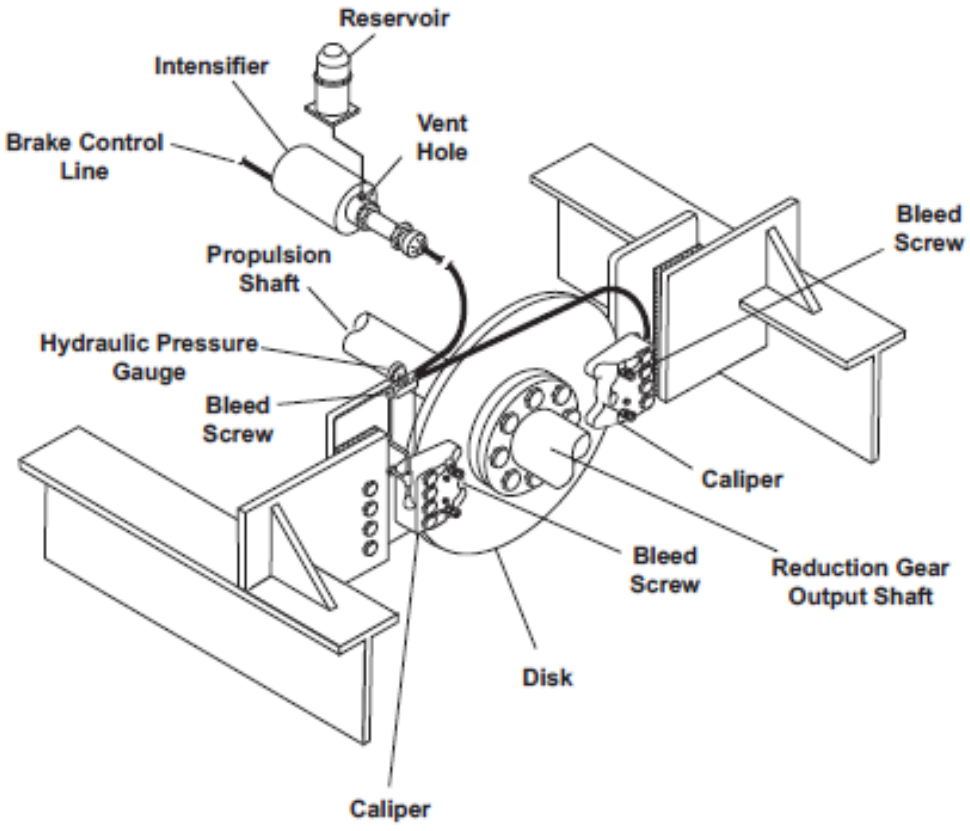

Figure 551-88L-202_02
Shaft Brake

4. Inspect the Propeller Shaft Seal / Stuffing box.

a. Mechanical shaft seal, (refer to Figure 551-88L-2062_03).

(1) Check for signs of leakage.

(2) During normal operations, a continuous sea water flush to the seal cavity must be maintained at a pressure of about 10 PSIG.

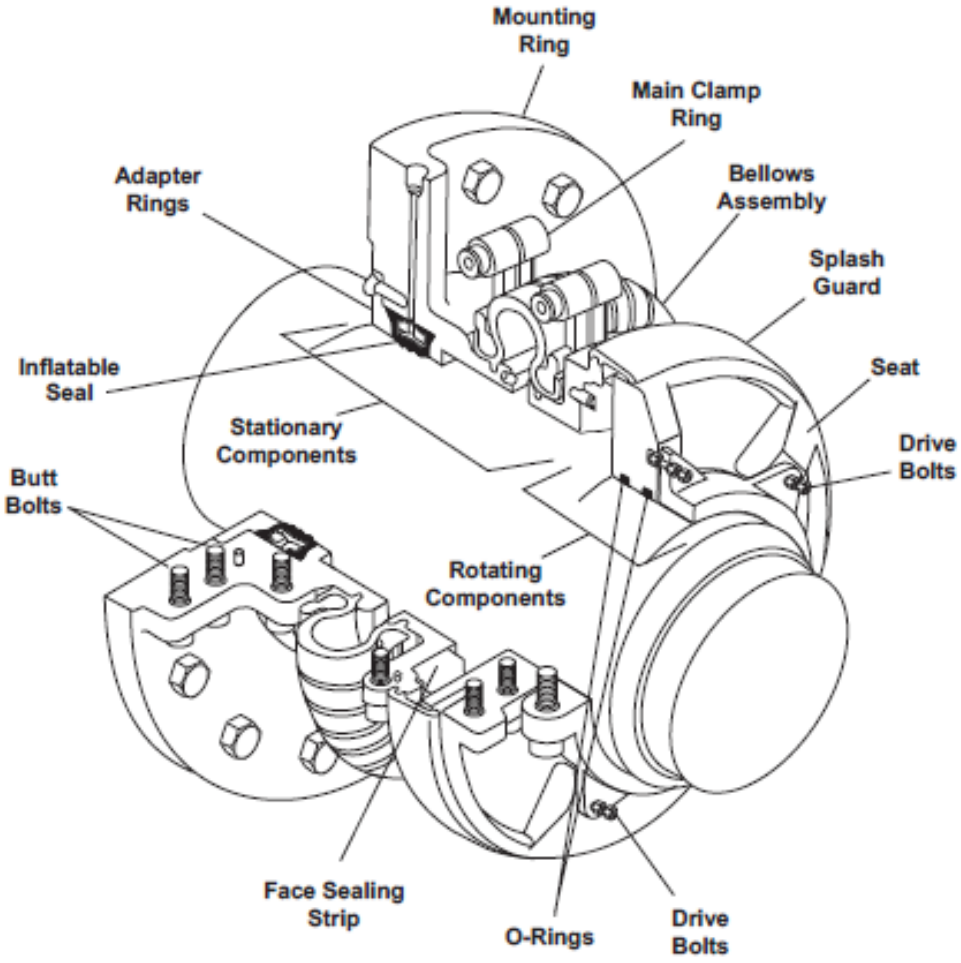

Figure 551-88L-2062_03
Mechanical shaft seal

b. Propeller shaft stuffing box, (refer to Figure 551-88L-2062_04).

(1) Inspect shaft packing gland for excess leakage.

(2) Adjust gland with unit running.

(3) Check gland for excess heat by placing hand on gland after adjustment.

(4) Ensure slot mounting plates are installed.

(5) Check flex hose for proper installation and deterioration.

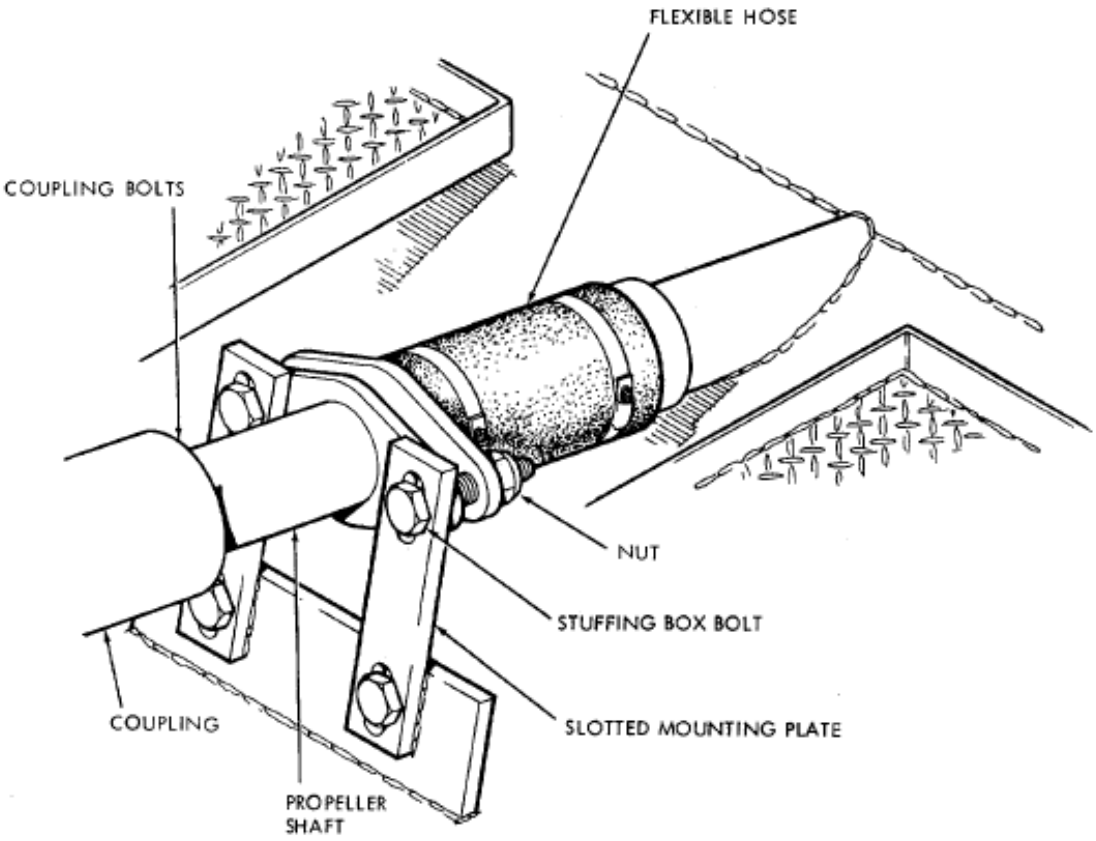

Figure 551-88L-2062_04
Stuffing box

5. Conduct an operational check of the Propeller Shaft and Propeller.

a. While underway, check for unusual vibrations by standing over the shaft as far to the stern as possible and feeling for any unusual vibrations.

b. If unusual vibrations are felt an inspection of the shaft and propeller must be conducted by a diver.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: None

Evaluation Preparation: None

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Conducted annual inspection of the Torsional Flex Coupling.			
a. Dry rot.			
b. Severe cracking.			
c. Cuts.			
d. Torsional mark offset.			
2. Conducted maintenance of the Reverse Reduction Gear.			
a. Sounded hold down bolts, ties, chocks.			
b. Tightened loose fastenings.			
3. Conducted operational test of the Shaft brake.			
a. Manually engaged and disengaged.			
b. Checked for neutral engagement.			
c. Checked for in gear disengagement.			
4. Inspected propeller Shaft Seal / Stuffing box.			
a. Mechanical shaft seal check.			
b. Stuffing box inspection.			
5. Conducted operational check of the Propeller Shaft and Propeller for vibration.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	TM 55-1905-223-24-1	UNIT, INTERMEDIATE DIRECT SUPPORT AND INTERMEDIATE GENERAL SUPPORT MAINTENANCE MANUAL FOR MAIN PROPULSION ENGINE FOR LANDING CRAFT UTILITY (LCU) (NSN 1905-01-154-1191) (REPRINTED W/BASIC INCL C1-3) (THIS	No	No
	TM 55-1915-200-10	Operator’s Manual for Logistic Support Vessel (LSV) (NSN 1915-01-153-8801) (Reprinted W/Basic Incl C1-6)	No	No
	TM 55-1915-254-10-1	OPERATOR'S MANUAL FOR LOGISTICS SUPPORT VESSEL (LSV-7 & -8)	No	No
	TM 55-1915-254-10-2	OPERATOR'S MANUAL FOR LOGISTICS SUPPORT VESSEL (LSV-7 & -8)	No	No
	TM 55-1925-236-12	OPERATOR AND UNIT MAINTENANCE MANUAL FOR SMALL TUG (ST) (NSN 1925-01-435-1713)	No	No
	TM 55-1925-273-10-1	Operator’s Manual For Inland Coastal Large Tug (LT) (NSN 1925-01-509-7013)(EIC XAG) (This item is included on EM 0272)	No	No

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed

during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

Prerequisite Individual Tasks : None

Supporting Individual Tasks :

Task Number	Title	Proponent	Status
551-88L-3061	Troubleshoot a Propulsion System	551 - Transportation (Individual)	Approved
551-88L-1035	Demonstrate Basic Knowledge of a Propulsion System	551 - Transportation (Individual)	Analysis

Supported Individual Tasks :

Task Number	Title	Proponent	Status
551-88L-1035	Demonstrate Basic Knowledge of a Propulsion System	551 - Transportation (Individual)	Approved
551-88L-3061	Troubleshoot a Propulsion System	551 - Transportation (Individual)	Approved
551-88L-2039	Conduct The Engine Room Watch	551 - Transportation (Individual)	Approved
551-88L-1035	Demonstrate Basic Knowledge of a Propulsion System	551 - Transportation (Individual)	Analysis

Supported Collective Tasks : None

ICTL Data :

ICTL Title	Personnel Type	MOS Data
88L20 Watercraft Engineer	Enlisted	MOS: 88L, Skill Level: SL2, Duty Pos: TFS, LIC: EN
88L30 Watercraft Engineer	Enlisted	MOS: 88L, Skill Level: SL3, Duty Pos: TFR, LIC: EN
88L40 Watercraft Engineer	Enlisted	MOS: 88L, Skill Level: SL4, Duty Pos: TGB, LIC: EN, SQI: O